

PATENT
Squire Docket No.: 45784-70 (P00009USU)**Amendments to the Claims:**

This Listing of Claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims

1-14 (Cancelled).

15. (Currently Amended) A phasing plug assembly, comprising:
a first phasing plug;
a second phasing plug positioned substantially adjacent to the first phasing plug,
both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and
where the first phasing plug has a rear side and a first intermediate side and the second phasing plug has a second intermediate side and front side and where the first intermediate side of the first phasing plug and the second intermediate side of the second phasing plug are positioned adjacent to one another in the assembly.

16. (Cancelled).

17. (Currently Amended) [[The assembly of claim 15]] A phasing plug assembly, comprising:
a first phasing plug;
a second phasing plug positioned substantially adjacent to the first phasing plug;
both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and
where the first phasing plug has a cavity and at least a portion of the second phasing plug is adapted to fit within the cavity of the first phasing plug.

18. (Previously Presented) The assembly of claim 17, where the cavity in the first phasing plug forms a first intermediate side of the first phasing plug and where the at least a portion of the second phasing plug that is adapted to fit with the cavity of the first phasing plug forms a second intermediate side that when positioned with the cavity of the first phasing plug fits substantially flush against the first intermediate side of the first phasing plug.

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19. (Previously Presented) The assembly of claim 17, where the at least a portion of the second phasing plug that first within the cavity of the first phasing plug is affixed to the first phasing plug.
20. (Previously Presented) The assembly of claim 17, where the second phasing plug substantially fills the cavity of the first phasing plug.
21. (Previously Presented) The assembly of claim 15, where the first phasing plug has a flange.
22. (Currently Amended) The assembly of claim ~~[[16]]~~ 15, where the rear side of the first phasing plug is generally spherical in shape.
23. (Currently Amended) The assembly of claim ~~[[16]]~~ 15, where the rear side of the first phasing plug is adapted to be positioned adjacent to a diaphragm in a speaker assembly.
24. (Currently Amended) ~~[[The assembly of claim 15]]~~ A phasing plug assembly, comprising:
a first phasing plug;
a second phasing plug positioned substantially adjacent to the first phasing plug;
both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and
where the plurality of openings are circular openings positioned about the rear side of the first phasing plug.
25. (Previously Presented) The assembly of claim 15, where the distance between the plurality of openings is about 0.5 inches.
26. (Currently Amended) ~~[[The assembly of claim 15]]~~ A phasing plug assembly, comprising:
a first phasing plug;
a second phasing plug positioned substantially adjacent to the first phasing plug;
both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and

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where the plurality of openings form three rings, a first ring within a second ring, and the second ring within a third ring.

27. (Previously Presented) The assembly of claim 26, where the three rings are spaced substantially equidistant from one another.

28. (Cancelled).

29. (Previously Presented) The assembly of claim 26, where the plurality of openings further includes a fourth ring, where the third ring is inside the fourth ring.

30. (Currently Amended) The assembly of claim [[16]] 15, where the plurality of openings form a compression ratio from about 6:1 to about 12:1 between the rear side of the first phasing plug and the diaphragm.

31. (Previously Presented) The assembly of claim 15, where the first phasing plug is made of steel.

32. (Previously Presented) The assembly according to claim 15, where the second phasing plug is made of plastic.

33. (Currently Amended) The assembly according to claim [[16]] 15, where the thickness between the rear side and the first intermediate side of the first phasing plug is substantially constant.

34. (Currently Amended) [[The assembly of claim 15]] A phasing plug assembly, comprising:

a first phasing plug;

a second phasing plug positioned substantially adjacent to the first phasing plug;

both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and

where the second phasing plug is interchangeable.

35. (Currently Amended) [[The assembly of claim 15]] A phasing plug assembly, comprising:

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a first phasing plug;
a second phasing plug positioned substantially adjacent to the first phasing plug;
both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and
where the first phasing plug is [[construction]] constructed from a unitary work-piece.

36. (Currently Amended) [[The assembly of claim 15]] A phasing plug assembly, comprising:

a first phasing plug;
a second phasing plug positioned substantially adjacent to the first phasing plug;
both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and
where the second phasing plug is assembled from at least separate two pieces.

37. (Currently Amended) [[The assembly of claim 15]] A phasing plug assembly, comprising:

a first phasing plug;
a second phasing plug positioned substantially adjacent to the first phasing plug;
both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and
where the second phasing plug is constructed from a unitary work-piece.

38. (Currently Amended) The assembly of claim [[16]] 15, where the plurality of openings includes a first plurality of openings and a second plurality of openings, where the first plurality of openings extend from the rear side to the first intermediate side of the first phasing plug and the second plurality of openings extends from the second intermediate side to the front side of the second phasing plug, and where the size of the first plurality of openings are substantially similar to the second plurality of openings to provide a continuous transition between the first and second plurality of openings.

39. (Previously Presented) The assembly of claim 38, where the second plurality of openings are substantially straight as they extend through the second intermediate side to the front side of the second phasing plug.

40. (Previously Presented) The assembly of claim 38, where the second plurality of openings form a curve as they extend from the intermediate side of the second phasing plug to the front side of the second phasing plug.

41. (Previously Presented) The assembly of claim 38, where the first and second phasing plugs have a center axis and where the second plurality of openings in the second phasing plug exits through the front side substantially parallel to the center axis.

42. (Previously Presented) The assembly of claim 38, where the first and second phasing plugs have a center axis, where the second plurality of openings in the second phasing plug exit through the front side at an acute angle relative to the center axis.

43. (Previously Presented) The assembly of claim 42, where the acute angle is less than about 25°.

44. (Previously Presented) The assembly of claim 38, where the first plurality of openings are substantially straight as they extend through the rear side of the first phasing plug to the first intermediate side of the first phasing plug, and the second plurality of openings substantially curve as they extend through the second intermediate side of the second phasing plug to the front side of the second phasing plug.

45. (Currently Amended) [[The assembly of claim 15]] A phasing plug assembly, comprising:

a first phasing plug;

a second phasing plug positioned substantially adjacent to the first phasing plug;

both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and

where the plurality of openings curve from a rear side of the first phasing plug to a front side of the second phasing plug as they extend through the first and second phasing plugs.

46. (Currently Amended) [[The assembly of claim 15]] A phasing plug assembly, comprising:

a first phasing plug;

a second phasing plug positioned substantially adjacent to the first phasing plug;

both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and

where each of the plurality of openings is of a substantially equal length measured between a rear side of the first phasing plug and a front side of the second phasing plug.

47. (Currently Amended) A phasing plug assembly, comprising:

a first phasing plug made of steel having a plurality of openings through the first phasing plug; and

a second phasing plug having a plurality of openings aligning with the plurality of openings in the first phasing plug when the second phasing plug is placed adjacent to the first phasing plug, where the first phasing plug has a rear side and a first intermediate side and the second phasing plug has a second intermediate side and front side and where the first intermediate side of the first phasing plug and the second intermediate side of the second phasing plug are positioned adjacent to one another in the assembly.

48. (Previously Presented) The assembly of claim 47, where the second phasing plug is made of steel.

49. (Previously Presented) The assembly of claim 47, where the second phasing plug is made of plastic.

50. (Previously Presented) The assembly of claim 47, where the first phasing plug is formed from a unitary steel piece.

51. (Currently Amended) [[The assembly of claim 47]] A phasing plug assembly, comprising:

a first phasing plug made of steel having a plurality of openings through the first phasing plug;

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a second phasing plug having a plurality of openings aligning with the plurality of openings in the first phasing plug when the second phasing plug is placed adjacent to the first phasing plug; and

where the second phasing plug is formed from at least two pieces.

52. (Cancelled).

53. (Currently Amended) [[The assembly of claim 47]] A phasing plug assembly, comprising:

a first phasing plug made of steel having a plurality of openings through the first phasing plug;

a second phasing plug having a plurality of openings aligning with the plurality of openings in the first phasing plug when the second phasing plug is placed adjacent to the first phasing plug; and

where the first phasing plug has a cavity and at least a portion of the second phasing plug is adapted to fit within the cavity of the first phasing plug.

54. (Previously Presented) The assembly of claim 53, where the cavity in the first phasing plug forms a first intermediate side of the first phasing plug and where the at least of portion of the second phasing plug that is adapted to fit with the cavity of the first phasing plug forms a second intermediate side that when positioned with the cavity of the first phasing plug fits substantially flush against the first intermediate side of the first phasing plug.

55-64 (Cancelled).

65. (Currently Amended) A method for compressing air through a phasing plug assembly, comprising:

compressing air through a phasing plug assembly in at least two stages so that air passes through the first stage with better dimensional tolerances than through the second stage; and

forming the first stage of the phasing plug assembly from a unitary piece.

66. (Previously Presented) The method according to claim 65, forming the first stage of the phasing plug assembly with steel.

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67. (Cancelled).

68. (Previously Presented) The method according to claim 65, forming the second stage of the phasing plug with plastic.

69. (Currently Amended) [[The method according to claim 65,]] A method for compressing air through a phasing plug assembly, comprising:

compressing air through a phasing plug assembly in at least two stages so that air passes through the first stage with better dimensional tolerances than through the second stage;
and

forming the second stage of the phasing plug with at least two pieces.

70-78 (Cancelled).

79. (Currently Amended) [[The assembly of claim 15]] A phasing plug assembly, comprising:

a first phasing plug;

a second phasing plug positioned substantially adjacent to the first phasing plug;

both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs; and

where the first phasing plug has a rear side and a first intermediate side, and a first plurality of slot openings between the rear and first intermediate sides of the first phasing plug, the second phasing plug having a second intermediate side and a front side, and a second plurality of slot openings between the second intermediate and front sides of the second phasing plug, wherein the first plurality of slot openings on the first intermediate side of the first phasing plug is juxtaposed to the second plurality of slot openings on the second intermediate side of the second phasing plug to form the plurality of openings through both the first and second phasing plugs.

80. (Cancelled).

81. (Currently Amended) [[The assembly of claim 80]] A phasing plug assembly, comprising:

a first phasing plug;

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a second phasing plug positioned substantially adjacent to the first phasing plug;
both the first and second phasing plugs having a plurality of openings extending
through both the first and second phasing plugs;

where the first phasing plug has a rear side and a first intermediate side, and a first
plurality of openings extending between the rear side and the first intermediate side of the first
phasing plug, the first intermediate side has a cavity adapted to receive the second phasing plug,
where the second phasing plug has a front side and a second intermediate side, the second
intermediate side is adapted to fit in the cavity of the first phasing plug, and the second phasing
plug has a second plurality of openings that align with the first plurality of openings when the
second phasing plug is placed in the cavity of the first phasing plug; and

where the rear side of the first phasing plug is domed shaped.

82. (Currently Amended) [[The assembly of claim 80]] A phasing plug assembly,
comprising:

a first phasing plug;

a second phasing plug positioned substantially adjacent to the first phasing plug,

both the first and second phasing plugs having a plurality of openings extending
through both the first and second phasing plugs; and

where the first phasing plug has a rear side and a first intermediate side, and a first
plurality of openings extending between the rear side and the first intermediate side of the first
phasing plug, the first intermediate side has a cavity adapted to receive the second phasing plug,
where the second phasing plug has a front side and a second intermediate side, the second
intermediate side is adapted to fit in the cavity of the first phasing plug, and the second phasing
plug has a second plurality of openings that align with the first plurality of openings when the
second phasing plug is placed in the cavity of the first phasing plug; and

where the first and second phasing plugs are made of different materials.